# Data Crunchers Practice

This test will help you practice for the Data Crunchers event.  Good Luck!

# Quiz

**Section 1**

| Mass of Air Heads | |
|---|---|
| | Mass in Grams |
| Sample 1 | 10 |
| Sample 2 | 8 |
| Sample 3 | 9 |
| Sample 4 | 12 |

Ambika & Naman wanted to see if every piece of Airhead candy has the same mass. They weighed each candy piece of candy and recorded it in a data table. What is the range on this data?

○ 4

○ 5

○ 8

○ 12

## Mass of Air Heads

|  | Mass in Grams |
|---|---|
| Sample 1 | 10 |
| Sample 2 | 8 |
| Sample 3 | 9 |
| Sample 4 | 12 |

Ambika & Naman wanted to see if every piece of Airhead candy has the same mass. They weighed each candy piece of candy and recorded it in a data table. What is the mean of this data (rounded ot the closest whole number)?

○ 8

○ 9

○ 10

○ 11

| Mass of Air Heads | |
| --- | --- |
| | Mass in Grams |
| Sample 1 | 10 |
| Sample 2 | 8 |
| Sample 3 | 9 |
| Sample 4 | 12 |

Ambika & Naman wanted to see if every piece of Airhead candy has the same mass. They weighed each candy piece of candy and recorded it in a data table. Before they started, each student made a prediction on how much they thought the candy weighed. Ambika guessed 10g and Naman guessed 9g. Who was closer to the real average?

○ Ambika

○ Naman

## Mass of Air Heads

|  | Mass in Grams |
|---|---|
| Sample 1 | 10 |
| Sample 2 | 8 |
| Sample 3 | 9 |
| Sample 4 | 12 |

Ambika & Naman wanted to see if every piece of Airhead candy has the same mass. They weighed each candy piece of candy and recorded it in a data table. If they put all the candy on the scale at once, how much would all the candy weigh in g?
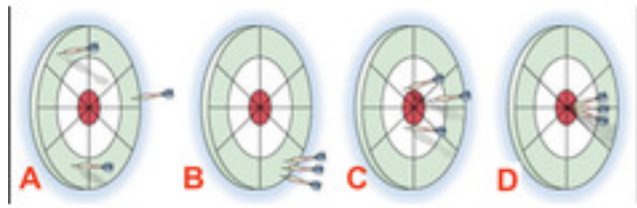
○ 25

○ 29

○ 32

○ 36

# Quiz

**Section 2**
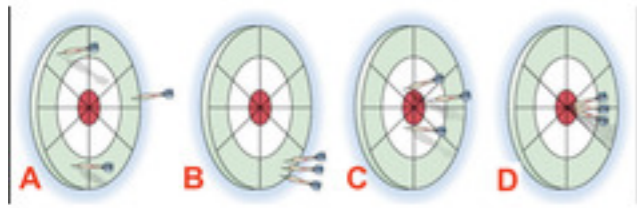
Look at the dart boards in the picture. You can click it to make it bigger. Which dart board shows high accuracy and high precision?
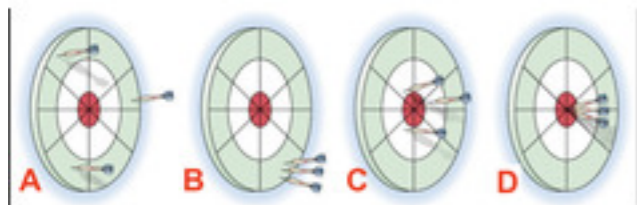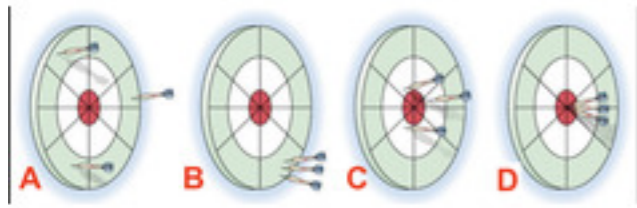
- A
- B
- C
- D

Look at the dart boards in the picture. You can click it to make it bigger. Which dart board shows low accuracy and high precision?

- A
- B
- C
- D

Look at the dart boards in the picture. You can click it to make it bigger. Which dart board shows low accuracy and low precision?

A

B

C

D

Look at the dart boards in the picture. You can click it to make it bigger. Which dart board shows high accuracy and low precision?
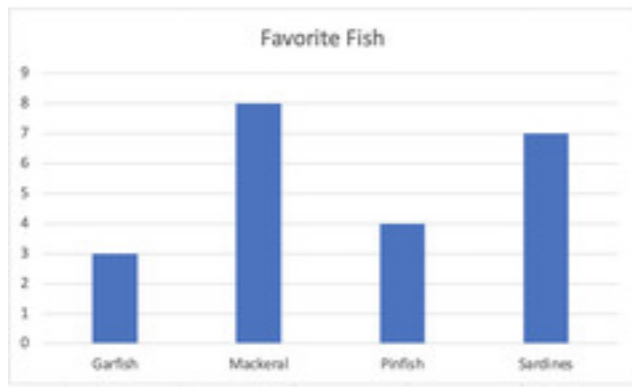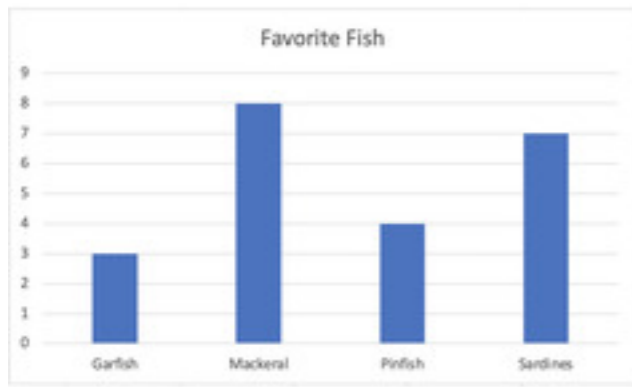
- A
- B
- C
- D

# Quiz

**Section 3**

There are 20 penguins. 1/4 are females. How many are females?

- ○ 5
- ○ 6
- ○ 10
- ○ 15

Favorite Fish

There are a group of penguins that live at the San Diego Zoo. Each of them has a favorite fish snack. The zookeepers make a graph to show what they like. You can click it to make it bigger. Which fish is liked by the most penguins?

○ Mackeral
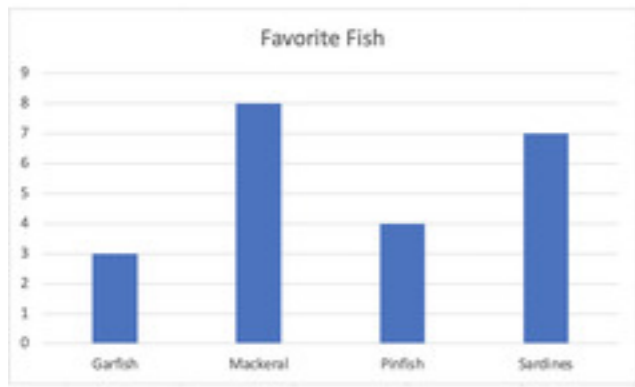
○ Garfish

○ Pinfish

○ Sardines

Favorite Fish

There are a group of penguins that live at the San Diego Zoo. Each of them has a favorite fish snack. The zookeepers make a graph to show what they like. You can click it to make it bigger. Which fish is least liked by the penguins?

○ **Mackeral**

○ **Garfish**

○ **Pinfish**

○ **Sardines**

Favorite Fish

There are a group of penguins that live at the San Diego Zoo. Each of them has a favorite fish snack. The zookeepers make a graph to show what they like. You can click it to make it bigger. How many penguins like Garfish?

○ 3

○ 5

○ 10

○ 20

Favorite Fish

There are a group of penguins that live at the San Diego Zoo. Each of them has a favorite fish snack. The zookeepers make a graph to show what they like. You can click it to make it bigger. How many total penguins are there?
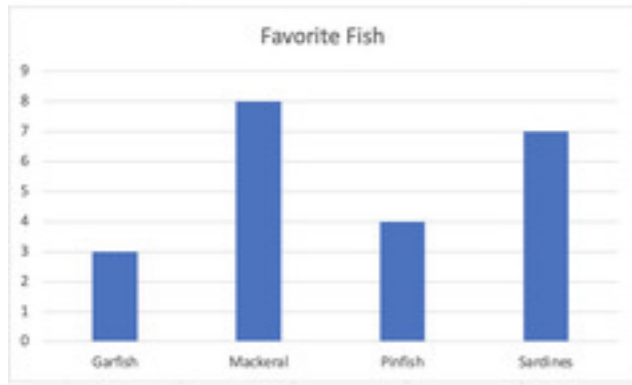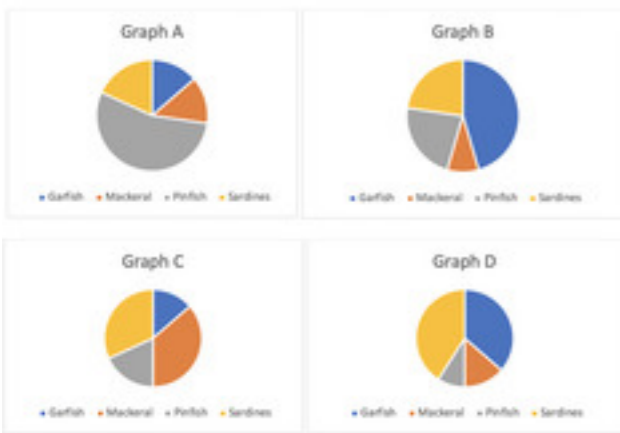
- 12
- 20
- 22
- 30

The zookeepers made a pie chart to show which fish were the favorite. Which of these graphs matches the data in the bars charts of the other questions?

- A
- B
- C
- D

Match each unit of measure to the thing that it would best be able to measure.

Milliliters

Wi... your ...

...water ...cket

Mass of 1 pair of AirPods

Matching Pairs

# Quiz

**Section 5**

Ellie measured the width of a sticky note to be 1 decimeter. What is that in cm?

- 0.01
- 0.1
- 10
- 100
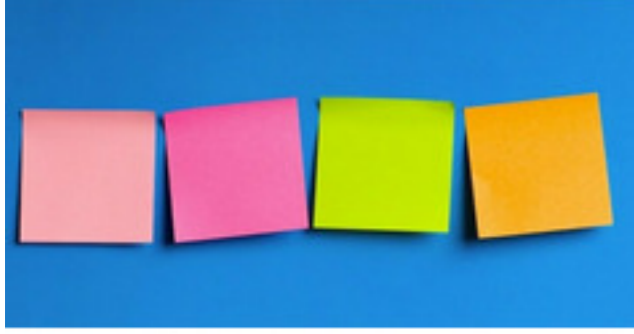
Ellie measured the width of a sticky note to be 1 decimeter. How many of these notes could you line up on a poster board than is 1 meter wide?

○ 5

○ 10

○ 20

○ 100

Ellie measured the width of a sticky note to be 1 decimeter. The sticky notes are the same width & height (they are square). How many could you fit on a poster board that is 1 meter wide and 50 cm tall?

- ○ 10
- ○ 50
- ○ 100
- ○ 500

# Convert 1356 ml to l.

○ 0.1356

○ 1.356

○ 13.56

○ 135.6

# Convert 0.56 Km to cm

○ 56

○ 560

○ 5600

○ 56000

# Quiz

**Section 6**

Snowfall in Erie, PA

Erie, PA is one of the snowiest places in the United States.  It started snowing at 8am and is predicted to continue snowing at a steady rate all day.  Based on the data in the graph, how much snow will Erie have by 3pm?

○ 120 cm

○ 150 cm

○ 160 cm

○ 180 cm

nearpod

| Plant Growth | |
| --- | --- |
| Day | Height (mm) |
| 0 | 0 |
| 2 | 5 |
| 4 | 8 |
| 6 | 12 |
| 8 | 15 |
| 10 | 20 |
| 12 | 28 |
| 14 | 33 |

Mya needs to make a graph showing the data she collected during her lab experiment about plant growth over a 2-week period. Her data is in the table (you can click it to make it bigger). Which kind of graph is the best way to show this data?

○ Pie Chart

○ Line Graph

○ Bar Graph

○ Scatter Plot

| Plant Growth | |
| --- | --- |
| Day | Height (mm) |
| 0 | 0 |
| 2 | 5 |
| 4 | 8 |
| 6 | 12 |
| 8 | 15 |
| 10 | 20 |
| 12 | 28 |
| 14 | 33 |

Mya needs to make a graph showing the data she collected during her lab experiment about plant growth over a 2-week period. Her data is in the table (you can click it to make it bigger). What is the best scale for this data for plant height?

○ A scale of 0-20 with an interval of 1

○ A scale of 0-40 with an interval of 1

○ A scale of 0-40 with an interval of 5

○ A scale of 0-100 with an interval of 10

| Plant Growth | |
| --- | --- |
| Day | Height (mm) |
| 0 | 0 |
| 2 | 5 |
| 4 | 8 |
| 6 | 12 |
| 8 | 15 |
| 10 | 20 |
| 12 | 28 |
| 14 | 33 |

Mya needs to make a graph showing the data she collected during her lab experiment about plant growth over a 2-week period. Her data is in the table (you can click it to make it bigger). From Day 10 to Day 12, what was the average rate of growth per day?

○ 1 mm per day

○ 2 mm per day

○ 4 mm per day

○ 8 mm per day

# Quiz

**Section 7**

Mrs. Lickenbauer's class collected same data on each other at the beginning of the year. They asked each person what their favorite color was. What kind of data is this?

- ○ Categorical
- ○ Numerical
- ○ Data that changes over time

Mrs. Lickenbauer's class collected same data on each other at the beginning of the year. They asked each person how old they were.  What kind of data is this?

○ **Categorical**

○ **Numerical**

○ **Data that changes over time**

Mrs. Lickenbauer's class collected same data on each other at the beginning of the year. They asked each person how tall they were when they started 2nd, 3rd & 4th grade. What kind of data is this?

○ **Categorical**

○ **Numerical**

○ **Data that changes over time**

| Favorite Color | |
| --- | --- |
| Color | number of students |
| Blue | 8 |
| Green | 4 |
| Orange | 3 |
| Purple | 6 |
| Red | 9 |

Mrs. Lickenbauer's class made a chart of their favorite colors. Which of the following statements is true?

○ The favorite class color is Blue.

○ More people like Orange than Green.

○ Twice as many people like Purple as Orange

○ The least favorite color is Red

| Teacher Age | |
|---|---|
| Teacher | Age |
| 1 | 42 |
| 2 | 35 |
| 3 | 46 |
| 4 | 27 |
| 5 | 58 |
| 6 | 49 |
| 7 | 35 |

Mrs. Lickenbauer's class asked a group of 6 teachers what their ages were. The data is in the table. What is the median age of these teachers?

○ 35

○ 40

○ 42

○ 46

| Teacher Age | |
|---|---|
| Teacher | Age |
| 1 | 42 |
| 2 | 35 |
| 3 | 46 |
| 4 | 27 |
| 5 | 58 |
| 6 | 49 |
| 7 | 35 |

Mrs. Lickenbauer's class asked a group of 6 teachers what their ages were. The data is in the table. What is the mode of this data set?

○ 7

○ 35

○ 42

○ 49